

EVALUATING HEALTHCARE PROFESSIONALS KNOWLEDGE, BELIEFS, AND
UNDERSTANDING OF THE IMPORTANCE OF EVIDENCE-BASED DEPRESSION AND
SUICIDE SCREENING: A QUALITY IMPROVEMENT PROJECT

DNP Final Project

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Abstract

BACKGROUND: Depression is a growing epidemic affecting individuals of all ages and will become the second leading cause of disability by 2020. Over 300 million people are affected and there are approximately 3000 deaths daily as a result of this public health crisis. **OBJECTIVES:**

The objective of this quality improvement project was to evaluate what healthcare professionals know about depression and any attitudes or beliefs about the importance of screening for depression and suicide among patients who present to Emergency Department settings.

DESIGN: A three-part survey was developed and distributed to registered nurses and advanced practice providers who work within the Emergency Departments and standalone emergency centers within a network organization. **RESULTS:** A total of 56 participants completed the survey across the network facilities and identified areas in which the organization can improve

the screening process to identify individuals in need of services and/or resources to address depression or depressive symptoms. **CONCLUSION:** Even though the United States

Preventative Services Task Force recommends that all individuals are screened at the primary care level for depression and suicide, there are no set guidelines to identify screening among individuals who visit an Emergency Department setting. The Emergency Department has been identified as the most underutilized facility to screen and to help provide individuals with treatment options or resources so that he or she can manage depressive symptoms. The results of this quality improvement project indicate that there is a need to ensure that the staff is kept updated about this condition and the proper training in place to help them successful screen individuals.

Keywords

depression, diagnosis, primary care, attitude, knowledge, belief, barriers, emergency room or emergency department, mental health illness, suicide, screening

Evaluating healthcare professionals' knowledge beliefs, and understanding of the importance of evidence-based depression and suicide screening: A quality improvement project

Section One: Nature of the Problem

Introduction to the Problem

Depression is a growing epidemic affecting individuals across the lifespan and is projected to become the second leading cause of disability by 2020 and the largest disease by 2030 in the world (World Federation for Mental Health, 2012; Kessler & Bromet, 2013). Over 300 million people are affected by this condition with an estimate of 3000 deaths occurring daily as a result of suicide associated with depression (World Federation for Mental Health, 2012). The National Institute of Mental Health (NIMH) reports that depression is the most common mental disorder often starting during the teenage years or in the early 20s and 30s and symptoms may escalate from that point (American Psychiatric Association, 2018; National Institute of Mental Health, 2018). As of 2016, 3.1 million adolescents between the ages of 12-17 years and 16.2 million adults 18 years and older were identified as having at least one major depressive symptom episode that lasted for a period of two or more weeks as defined by the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, 2013). A large number of these individuals will experience multiple episodes of depression throughout his or her lifetime as depression is a chronic condition that needs consistent monitoring. An individual can experience at least 4 episodes when major depressive symptoms are exacerbated with each episode potentially lasting up to twenty weeks at a time (McLaughlin, 2012).

Symptoms can range from mild to severe and consist of feelings of sadness or depression, loss of interest, appetite changes, insomnia, feelings of worthlessness, difficulty concentrating,

and/or suicidal thoughts (American Psychiatric Association, 2018; National Institute of Mental Health, 2018). Other medical conditions such as thyroid disease can mimic depressive symptoms of sadness, anhedonia, sleep disruptions and decreased energy. Sixty percent of adolescents and 37% of adults may receive no treatment due to misdiagnosis or lack of proper referral for healthcare resources (National Institute of Mental Health, 2017). Undiagnosed and untreated depression has an impact on daily functioning, medical costs and quality of life. This can also affect a person's ability to function in the workplace (Williams, Chung, & Muennig, 2017).

Not only is depression a major problem for persons; it also has an impact on society. The workforce outcomes may be affected if the person is unable to complete his or her work task and often result in higher rates of absenteeism (Lerner et al., 2010). It is estimated that over 36 billion dollars is lost annually in productivity as these individuals may not perform as well, miss more work, have functional limitations and in some cases prematurely retire. An individual with depression has been reported to miss an average of 10 working days each year because of the exacerbation of depressive symptomatology (Lerner et al., 2010). Adolescents often miss school and underperform when depressive symptoms are not controlled (Glier & Pine, 2002). Over 40,000 people die a year from suicide and these figures do not account for the number of individuals with a suicidal attempt (McLaughlin, 2012; American Foundation for Suicide Prevention, 2018). Suicide attempts and completions are also increasing among adolescents struggling with depression.

The symptoms of depression can predispose adolescents to engage in risky lifestyle behaviors such as binge drinking, alcohol abuse and use of illicit drugs in an attempt to manage their symptoms or make themselves feel better (National Institute of Mental Health, 2018). Risk

factors for depression include family history of depression, onset of puberty, comorbid mental or physical health disorder, social isolation, presence of stress, traumatic life events, substance use, and verbal or physical abuse (National Institute of Mental Health, 2018).

Current literature indicates that there is an increased risk for females to develop depressive symptoms once puberty commences due to hormonal changes and fluctuations that typically occur during puberty, postpartum and perimenopausal stages (Albert, 2015). Women also have additional risk factors to include losing a parent at a young age, use of oral contraceptive with high doses of progesterone, certain fertility treatments that contain growth hormone stimulants and psychosocial stressors such as the loss of a job and/or loss of support system (Bhatia, S.C. & Bhatia, S.K., 1999).

Unfortunately, many adolescents experiencing depression may not recognize their depressive symptoms. Primary care providers typically screen for depression and suicide during the annual well-child visits for individuals under 18 years of age. However, the literature indicates that even if 80% of these individuals are screened, there is only a small percentage, less than 50%, who are correctly identified as being depressed and/or suicidal. This leaves a majority of individuals who are missed or not properly diagnosed. Then there is the population of young people between the ages of 18-24 transitioning from a pediatrician and/or primary care provider who no longer have annual visits to undergo screening for these conditions. Unfortunately, 83% of individuals who died by suicide were noted to be seen by a primary care provider within the year before death with less than 30% of these individuals being seen by a behavioral health professional (O'Malley, 2018).

Approximately 1.5 million children, adolescents and young people are now using the Emergency Department as a primary source of healthcare services (Centers for Disease Control

and Prevention, 2017). This provides opportunity for Emergency Department healthcare professionals to screen all individuals for depressive symptoms and suicidal ideation (Hoyer & David, 2012; Chun, Duffy, & Linakis, 2013; Kowalenko & Khare, 2004). The Emergency Department has been identified as the most underutilized point of care to identify at risk individuals especially among the adolescent and young adult populations (Gray & Dihigo, 2015; O'Mara, Hill, Cunningham, & King, 2012). It is estimated that approximately 500,000 people visit an Emergency Department annually with a complaint of suicide attempt and reportedly 39% of individuals who committed suicide were seen in an Emergency Department within one year of his or her death (Hogan & Grumet, 2016; Gairin, House, & Owens, 2003; Da Cruz, et al., 2011). Emergency Department visits have seen an increase up to 40% of nonfatal self-harm incidents that are closely related to suicide since 2001 (O'Malley, 2018).

It is also important to note that some healthcare professionals in an acute care setting may not realize how important it is to assess all patients for depression and suicide in the inpatient and outpatient setting. At times, it may be difficult to conduct evidenced based screening and provide treatment resources or options. Therefore, the author became interested in gathering information about healthcare professionals knowledge, attitudes, perceptions and beliefs about depression and suicide among individuals who visits an Emergency Department within a large urban hospital.

The plan is to provide the survey results to the network organization so that the leadership team can identify additional training needs for the staff and/or areas of improvement in regard to ensuring that all patients are screened, identified and provided resources as needed. The next section presents information on why healthcare professionals need to be knowledgeable

regarding symptoms of depression among individuals who present to an emergency department for physical healthcare but may be experiencing depressive symptoms.

Purpose of the Project

The purpose of this project is to improve the screening process for depression and suicide among individuals who present to an Emergency Department setting by surveying healthcare professionals (registered nurses and advanced practice providers) on their knowledge, attitude and/or beliefs about mental health conditions. The author was interested in finding out what professionals knew about the condition and potential barriers in order to provide future educational training that could help to improve the screening process for all individuals. The network organization has seen an increase in the number of patients presenting to an Emergency Department who may or may not have a primary care provider. These individuals may be included in the growing epidemic of ones with depressive symptoms who are potentially misdiagnosed and/or untreated. In efforts to improve health outcomes and address this public health issue, the organization was interested in identifying how screening efforts could be improved to provide patients with resources and/or identify those at-risk even if they are not presenting to the Emergency Department for a mental health complaint. It was anticipated that the survey results would identify areas of deficiency in which the organization can provide additional training to current staff and incorporate training for all new incoming staff on how to use the screening tool efficiently. The organization could utilize the data to develop a policy that all individuals will undergo screening for depression and suicide regardless of the chief complaint.

The network consists of full-service hospitals, standalone emergency centers, urgent care centers and physician offices. Each facility within the organization currently conduct some aspect of screening individuals in both the outpatient and inpatient settings about depression and suicide. The emergency departments within this organization see and treat many individuals on a

daily basis and have seen an increase in the number of individuals with depressive symptoms in need of treatment and/or resources making this the ideal setting to survey healthcare professionals about what they knew when it came to depression and suicide.

With the growing number of individuals who are undiagnosed with depression, all patients should be screened for mental health disorders at every point of contact with a healthcare professional including in the emergency department. However, before the network could address the methods of screening, it was beneficial to identify what members of the healthcare team knew about this disorder. This would help to identify potential continuing educational opportunities for the network. The author of this project anticipated that the results from the survey would provide valuable information that the network organization could utilize to provide continuing education on the growing incidence of depression and suicide ideation, and this could potentially improve patient outcomes.

The objectives of this DNP scholarly project were to:

1. Implement a survey to healthcare professionals (registered nurses and advanced practice providers) who work in the emergency departments/standalone emergency centers within a network organization to assess their knowledge, attitude and/or beliefs about depression and suicide.
2. Evaluate survey results and provide recommendations to the network organization on any areas of improvement and strengths based on survey results combined with existing evidence to help improve screening adolescents for depression and suicide.

The DNP project is guided by the essentials as outlined by the American Association of Colleges of Nursing (AACN) which identifies eight fundamental competencies for DNP

graduates. The author identified five DNP essentials that guided this scholarly project which included Essentials I, II, III, VI, and VII (AACN, 2006). More specifics on these essentials are discussed in the Implications section of this paper. A complete list and description of each essential are shown in Table 1.

Section Two: Review of the Literature

Clinical Practice Problem Statement

Over 300 million people live with depression which is identified as the leading cause of disability among individuals between the ages of 15-44 years old (Anxiety and Depression Association of America, 2018). There are a growing number of individuals without a primary care provider and over 136.9 million individuals visit an emergency department on an annual basis (Centers for Disease Control and Prevention, 2017). This makes the emergency department an optimal environment for all individuals to be screened for depression. Therefore, the clinical practice problem was to survey healthcare professionals (registered nurses and advanced practice providers) working in an Emergency Department setting to identify what he or she knows, belief, and understand about the depression and suicide and the importance of screening.

Even though depression and suicide are two different conditions; they go together when discussed. Depression can lead to suicide and it is impossible to address one without the other. It is believed that if a patient has symptoms of depression that are not treated, it can lead the individual to commit suicide. However, this does not mean that every depressed individual will attempt or commit such an act. The significance of screening for depression and suicide can lead to proper diagnosis, treatment, and improved health outcomes and possibly reduce the chances of an individual harming themselves.

PICO

In patients presenting to an Emergency Department, how does knowledge, attitudes and/or beliefs of healthcare professionals (registered nurses and/or advanced practice providers) affect screening for depression and suicide?

Evaluation/Summary of the Evidence from the Literature

The key words used for the literature search include the following: depression, diagnosis, primary care, attitude, knowledge, belief, barriers, emergency room or emergency department, mental health illness, suicide, screening. A variety of databases were used to include PubMed, CINAHL, PsycINFO, Emergency Medicine Journal and the American Journal of Emergency Medicine over a period of 10 years from 2008-2018. Majority of the articles found were a level V which consisted of case studies, questionnaires, focus groups, surveys, qualitative, quantitative, and descriptive studies. No randomized control trials were found; however, an article written by Kessler suggested that randomized control trials would be beneficial to have a better understanding of the effects of depression and treatment methodologies (Kessler & Bromet, 2013). Two systematic reviews were found but one was from an earlier date than the specified timeframe. Unfortunately, the literature search did not yield much data on the topic of this DNP project. Over 100 articles were found that addressed depression, screening and benefits of screening from an Emergency Department setting and the author narrowed the literature down to 41 articles to provide an extensive literature search on this topic and a complete review of the literature is shown in Table 2.

Critical Appraisal of the Evidence

Depression and suicide are conditions that have been around for a very long time. In 1999, the Surgeon General's Call to Action placed emphasis on the need to work towards suicide prevention and making the public aware of the seriousness of this health problem. Even though the Surgeon General's Call to Action plan is over two decades old, according to NIMH, suicide is the 2nd leading cause of death for ages 10-34 and 3rd for ages 35-54 (NIMH, 2018). Over 45,000 die annually from suicide with an annual cost of approximately 69 billion dollars (American Foundation for Suicide Prevention, 2018). This indicates that there are more young people dying from self-inflicted wounds than any other chronic conditions such as pneumonia, stroke, AIDS, birth defects, and/or heart problems (United States Public Health Service, 1999; Siu, 2016; Horowitz, Ballard, & Pao, 2009). As a result, the AIM initiative (Awareness, Intervention, and Methodology) was developed by the Surgeon General which proposed 15 recommendations to bring more awareness to the toll that mental health disorders including depression place on families and the public with a focus to combat the number of individuals committing suicide. The American Academy of Pediatrics (AAP) and the U.S. Preventative Services Task Force (USPSTF) have also recognized the importance of screening as a national healthcare priority indicating that morbidity and mortality rates can potentially improve through early intervention and treatment that can be started immediately as a result of effective screening methods (Gray & Dihigo, 2015; Siu, 2016).

It is not an easy task to identify individuals at risk especially young people as many do not openly discuss their symptoms, recognize that they are depressed and/or want to admit that he or she is contemplating suicide. Primary care providers typically screen for depression and suicide during the annual well-child visits for individuals under 18 years of age; however, the literature indicates that even if 80% of these individuals are screened, there is only a small

percentage, less than 50%, who are correctly identified as being depressed and/or suicidal. This leaves a majority of individuals who are missed or not properly diagnosed. Then there is the population of young people between the ages of 18-24 transitioning from a pediatrician and/or primary care provider who no longer have annual visits or undergo any type of regular screening. Considering that over 130 million children, adolescents, young people and adults are now using the Emergency Department as a primary source of healthcare services, this makes the Emergency Department an optimal opportunity to screen all individuals for issues with depression and/or suicidal thoughts (Gray & Dihigo, 2015; O'Mara, Hill, Cunningham, & King, 2012; CDC, 2017).

Considering the growing number of individuals who are undiagnosed and undertreated with depression, it is critical that healthcare professionals consider a systematic approach to screen all individuals for mental health conditions at every point of contact with a provider. Effective screening more often can help to avoid missing individuals who are depressed or contemplating suicide. Healthcare professionals face ethical issues on a daily basis when providing patient care especially when trying to determine when to screen, how often to do so or may lack the knowledge about the seriousness of this condition. The United States Preventative Services Task Force (USPSTF) recommends that all individuals undergo screening in the primary care setting for depression (United States Preventive Services Task Force, 2016a; United States Preventive Services Task Force, 2016b). However, there are many individuals without a primary care provider, and it is becoming imperative that healthcare professionals working in acute care settings such as the Emergency Department understand the importance of screening. It is also important to note that by 2030, the United States can expect a shortage of over 100,000

physicians which could have a huge impact on individuals being properly screened and/or given treatment options or resources (Association of American Medical Colleges, 2018).

On average, a primary care provider spends approximately 15.7 minutes with a patient presenting with an acute illness. Wellness visits or annual exams typically allows 30-45 minutes of face-to-face time with the provider and this is typically when an individual is screened for mental health issues. However, in an acute care setting or Emergency Department, time is usually limited due to the volume of individuals seen on a daily basis. Unfortunately, time constraints, limited resources and lack of training are reported as obstacles that healthcare professionals face when trying to identify individuals at risk for untreated depression or committing suicide unless the individual presents with a mental illness chief complaint (Tai-Seale, McGuire, & Zhang, 2007).

The literature supports screening of all individuals in the Emergency Department and many facilities do screen; however, many are not thoroughly screened especially if the chief complaint is not related to a mental health issue. Mental health screening in the Emergency Department setting has proven to be supported by all individuals and families. Review of the literature indicates that adolescents and young people are comfortable with healthcare professionals screening for depression and suicide even if that was not the reason for the visit (O'Mara, Hill, Cunningham, & King, 2012; Ballard, Horowitz, Jobes, Wagner, Pao, & Teach, 2013). It is important to note that screening allowed individuals to openly share thoughts or feelings about these conditions once asked as the participants in numerous studies indicated that they may not have shared this information otherwise if not approached. Participants reported they felt more comfortable and safe talking with the Emergency Department staff/healthcare professionals without feeling that he or she were being

judged (Ballard et al., 2013). Some individuals did not realize that his or her feelings were positive signs of depression until asked by a staff member during the screening process.

As a healthcare professional, there is an ethical obligation to promote health diplomacy, reduce disparities and work to improve public health outcomes utilizing evidence-based practice (Reilly & Jurchak, 2017; American Medical Association, 2016; Olson & Stokes, 2016). Meeting this ethical obligation requires a collaboration among everyone involved in an individual's care and the team must work together to put policies and/or procedures in place to help improve mental health outcomes.

However, before a facility can address the screening process, it is important to ensure that the healthcare team has a good understanding of mental health conditions, his or her attitude, beliefs and/or barriers that can hinder the care provided to at-risk individuals. There was little literature available addressing the knowledge and attitudes among healthcare professionals in the United States. The literature does indicate that when healthcare professionals were surveyed in India, United Kingdom, Asia, Australia and Canada, the consensus was that healthcare professionals lacked knowledge, training and resources available in regards to addressing mental health issues in the Emergency Department setting (Almanzar et al., 2014; Camilli & Martin, 2005; Cepoiu et al., 2007; Clarke, Usick, Sanderson, Giles-Smith, & Baker, 2014; Dobscha, Gerrity, & Ward, 2001; Innes, Morphet, O'Brien, & Munro, 2013; Liu, Lu, & Lee, 2008; Wolf, Perhats, & Delao, 2015). Majority of the literature consisted of surveys, questionnaires, retrospective studies and literature reviews addressing the importance of depression and suicide screening. The USPSTF strongly recommends screening at the primary care level for all individuals; however, there are no set recommendations or guidelines on how this major public health issue should be addressed from an Emergency Department standpoint (Cepoiu et al.,

2007; Chang, Gitlin, & Patel, 2011; Da Cruz et al., 2011; Ingram, Weston, Ritchie, & Larson, 2017; Khav, Weiland, Jelinek, Knott, & Salzberg, 2013; Kowalenko & Khare, 2004). Even though it is strongly recommended that all primary care providers screen for mental health, the literature indicates that during a well visit which is typically once a year, only 67% are screened for mental health, 35.2% are screened for suicidal thoughts/ideations, and then on average, 61.1% are rarely screened for suicide unless clinically indicated (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Boudreaux et al., 2015; Diamond et al., 2012; Gairin, House, & Owens, 2003; Ingram, Weston, Ritchie, & Larson, 2017; Marynowski-Traczy & Broadbent, 2011; Rhodes, 2008). This raises the question as to why screening is not done on a regular basis and why are we not screening individuals 100% of the time on this major health issue affecting so many. Besides healthcare professionals having little to no knowledge on the seriousness of depression and suicide, the literature also indicates that there are numerous barriers that hinder the screening process.

Review of the literature indicates that time constraints play a role in why individuals are not screened in the Emergency Department setting (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Boudreaux et al., 2015; Diamond et al., 2012; Gairin, House, & Owens, 2003; Ingram, Weston, Ritchie, & Larson, 2017; Marynowski-Traczy & Broadbent, 2011; Rhodes, 2008). Emergency Departments are constantly under pressure to see a large volume of individuals within a certain timeframe and if the patient does not present with a depression or suicide chief complaint, no additional screening will take place (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Boudreaux et al., 2015; Diamond et al., 2012; Gairin, House, & Owens, 2003; Ingram, Weston, Ritchie, & Larson, 2017; Marynowski-Traczy & Broadbent, 2011; Rhodes, 2008). The literature also indicates that even though an individual does not present with a mental health illness,

undiagnosed or untreated depression can be masked by other symptoms such as anxiety or other physical ailments (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Boudreaux et al., 2015; Diamond et al., 2012; Gairin, House, & Owens, 2003; Ingram, Weston, Ritchie, & Larson, 2017; Marynowski-Traczy & Broadbent, 2011; Rhodes, 2008). Individuals struggling with depression tend to visit an Emergency Department more frequently than the general population which makes this a prime setting to increase screening efforts (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Abar, Hong, Aaserude, Holub, & DeRienzo, 2017; Da Cruz et al., 2011; Ingram, Weston, Ritchie, & Larson, 2017; Rhodes, 2008; Savoy & O’Gurek, 2016).

Healthcare professionals report that they are reluctant to increase screening methods due to lack of resources available for the individual (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Betz & Boudreaux, 2016; Camilli & Martin, 2005; Cepoiu et al., 2007; Dobscha, Gerrity, & Ward, 2001; Ingram, Weston, Ritchie, & Larson, 2017; Nutting et al., 2002; Rhodes, 2008; Wolf, Perhats, & Delao, 2015). Individuals who test positive for depression through screening efforts are often turned away from the Emergency Department with basic information to follow up on an outpatient basis; however, it may take time to get treatment started especially if a mental health professional is not available to take on new individuals. It is also important to note that depending on the severity of depression and if the individual tests positive for suicidal thoughts, the individual is then faced with an extended stay in the Emergency Department awaiting placement for a mental health facility which affects the Emergency Departments length of stay and can exacerbate the individuals depressive symptoms even more (Abar, Hong, Aaserude, Holub, & DeRienzo, 2017; Betz & Boudreaux, 2016; Marynowski-Traczy & Broadbent, 2011; Schumann, Schneider, Kantert, Lowe, & Linde, 2012). Therefore, healthcare professionals are not screening because he or she does not know what to do or offer the patient if

the screening results are positive. On the other hand, individuals are reluctant to self-report symptoms due to feeling like a burden, being misunderstood, judged as being different or facing stigmatization from the healthcare team (Abar, Hong, Aaserude, Holub, & DeRienzo, 2017; Clarke, Usick, Sanderson, Giles-Smith, & Baker, 2014; Kessler & Bromet, 2013; Knaak, Mantler, & Szeto, 2017; Schumann, Schneider, Kantert, Lowe & Kinde, 2012). It is apparent that there are definitely issues with lack of knowledge, perception, attitude, belief and barriers that prevent screening by both the healthcare professional and the patient. As the number of individuals struggling with depression continue to increase, statistical data indicates that this condition will become the leading cause of disability by 2020 and these individuals are at a greater risk, at least 8 times more than the general population, of attempting or committing suicide (Betz & Boudreaux, 2016; Burucsa & Iacono, 2007; Cepoiu et al., 2007; Kessler & Bromet, 2013; Kessler, 2012; Schumann, Schneider, Kantert, Lowe, & Linde, 2012). This is truly a burdensome and expensive condition that is costing healthcare approximately billions of dollars annually with lost earnings amounting to \$193 billion worldwide (Chun, Duffy, & Linakis, 2013).

The literature clearly indicates the importance of screening and also indicates that screening should take place at all points of contact with a healthcare professional including in the Emergency Department setting. Early screening is beneficial and increased screening has been reported as being able to identify at least double the number of individuals at risk (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Betz & Boudreaux, 2016; Chang, Gitlin, & Patel, 2011; Chun, Duffy, & Linkas, 2013; Da Cruz et al., 2011; Diamond et al., 2012; Dobscha, Gerrity, & Ward, 2001; Ingram, Weston, Ritchie, & Larson, 2017; Khav, Weiland, Jelinek, Knott, & Salzberg, 2013; Kowalenko & Khare, 2004; Lopez, Sanchez, Killian, & Eghaneyan, 2018). However, in

order to improve screening methods, facilities need to identify training needs and ensure that resources are available to healthcare professionals once an individual is screened and tests positive for depression. Not all depressed individuals require an inpatient hospitalization, but healthcare professionals will not know what services are needed if the time is not taken to properly screen each and every individual including in the Emergency Department setting.

The literature consistently indicates that the Emergency Department setting is the 1st level of intervention for these individuals at risk especially considering that approximately 500,000 people visit an Emergency Department annually with a complaint of suicide attempt (Chun, Duffy, & Linakis, 2013; Hoyer & David, 2012; Khav, Weiland, Jelinek, Knott, & Salzberg, 2013; Rhodes, 2008). It also indicates that approximately 39% of individuals who committed suicide were seen in an Emergency Department or by a healthcare professional within one year of his or her death (Da Cruz et al., 2011; Gairin, House, & Owens, 2003). Hopefully increased screening can help to reduce the number of suicides and improve the overall health of these individuals by offering resources and treatment options (O'Mara, Hill, Cunningham, & King, 2012). The leadership team and organization systems must also be on board to not only recognize public health issues needing addressed but to foster and encourage the team to work towards goals for improvement. Even though there are no set policies stating that Emergency Departments need to screen individuals for depression and/or suicide it is best practice to have guidelines in place to address this growing epidemic and improve outcomes. Doctoral and advanced practice nurses can be the driving force to help implement evidence-based practice within the department and/or organization systems by analyzing data, synthesizing and then tailoring steps or guidelines to help identify individuals at risk and address this public health

concern as well as understanding barriers that may be affecting healthcare professionals when it comes to screening individuals (American Association of Colleges of Nursing, 2006).

Presentation of Theoretical Basis

Nursing theory is an important aspect of the care provided as it can lead to improved patient care, patient outcomes, and provide guidance for education and research (Colley, 2003). In addressing this DNP project, there are several nursing theories that contribute to the promotion of mental health; however, Peplau's theory of interpersonal relations is closely aligned with this project (Bittencourt, Marques, & Barroso, 2018).

Dr. Hildegard Peplau's theory of interpersonal relations initially focused on general nursing knowledge but later expanded to incorporate psychiatric mental health by bridging the gap between what we know along with what we should be doing as healthcare professionals to improve the well-being of individuals (Bittencourt, Marques & Barroso, 2018). Peplau's theory consists of four phases with Phase 1 being the orientation phase that involves identifying or assessing the individual's needs. Phase 2 then identifies what is needed to help the individual. Phase 3 entails building the relationship between the individual and staff in order to achieve the ability work together and towards the desired outcomes. The final Phase 4 involves, coming to a resolution or helping the individual to feel as if he or she can get the problem resolved or have resources available (Bittencourt, Marques & Barroso, 2018). This is an applicable theory for use in a depression screening project as the goal is to identify needs, ensure that the information provided is ample enough to decipher what type of care is needed, building a trusting relationship and then getting the individual the appropriate treatment options or resources needed to help improve safety, outcomes and hopefully an improved quality of life.

The Plan-Do-Study-Act (PDSA) cycle (Figure 1) was an appropriate model for this project as outlined by the Institute for Healthcare Improvement Model for Improvement (Figure 2). PDSA consist of four steps that include planning a test or observation, trying out the test or observation, analyzing the results and refining a change based on the analyzed data (Agency for Healthcare Research and Quality, 2008). This model was ideal to use for this scholarly DNP project to evaluate the current depression screening process within the organization, identify potential areas for improvement and changes, if any, are needed (Institute for Healthcare Improvement, 2019). Statistical data and the evidence indicate that depression and suicide is on the rise and evidence supports increased screening for these conditions. Unfortunately, due to the lack of guidelines or information available on the importance of screening in the Emergency Department setting, utilizing the PDSA model can help to identify continuing education areas that the network organization can implement to address any potential barriers that are potentially affecting the screening process by healthcare professionals working in the Emergency Department setting (MeInyk & Fineout-Overholt, 2015, p. 83).

Utility/Feasibility

It was feasible for the network to allow the implementation of this scholarly project as healthcare professionals have an ethical duty to protect individuals and this includes promoting the well-being which includes helping individuals struggling with mental health issues (Bittencourt, Mareques, & Barroso, 2018). Mental health issues include depression and suicide which is becoming the leading cause of disability in the world (World Federation for Mental Health, 2012; Kessler & Bromet, 2013). The literature clearly indicates that screening should take place in the primary care setting and also discusses the importance of doing so when individuals are seen in Emergency Department settings; however, there are many barriers to

screening in this setting which include perception, time restraints, resistance, lack of knowledge, and/or resources (Abar, Holub, Lee, DeRienzo, & Nobay, 2017; Betz & Boudreaux, 2016; Camilli & Martin, 2005; Cepoiu et al., 2007; Dobscha, Gerrity, & Ward, 2001; Ingram, Weston, Ritchie, & Larson, 2017; Nutting et al., 2002; Rhodes, 2008; Wolf, Perhats, & Delao, 2015).

This project consisted of a survey did not increase cost or time for healthcare professionals to complete. The information gathered from the study could be incorporated into a teaching opportunity that can be shared with healthcare professionals across the network.

Recommendations Summary

The author strongly recommended that healthcare professionals within the network were surveyed to see what he or she knows about depression and suicide, the importance of screening and to identify any potential barriers or perceptions that could hinder professionals from screening every patient who presents to an Emergency Department for depression or suicide regardless of the presenting chief complaint. The literature discusses the statistical data to support that there is an increasing number of individuals who are struggling with depression or contemplating committing suicide.

Stakeholders included the patient and families as improved screening could help to identify at risk individuals as well as provide treatment options/resources. The healthcare professionals were are also stakeholders as they need to understand the significance of mental health illnesses in order to understand why screening needs to take place at all times. The network is a stakeholder in helping to improve overall health outcomes.

Section Three: Methods

Recommendations for Implementation of Practice Change

The recommendations from the quality improvement project are to incorporate screening of all individuals who present to the Emergency Department regardless of chief complaint. There are a variety of screening tools available; however, before the organization could address which screening method is appropriate, it was important to understand what the staff knows about the condition, beliefs and identify any potential barriers that may affect the screening process. Lack of knowledge by healthcare professionals can be a hinder in identifying at risk individuals. Implementation of this scholarly project allowed the author and the organization to find out what the staff members know, belief and understand about depression that can be useful in determining if any changes were needed to the current screening process within the facilities.

Plan for Implementation of the Quality Improvement Project

The PDSA cycle was an appropriate and most often used scientific method used in healthcare to improve systems and/or outcomes (Taylor et al., 2014; MeInyk & Fineout-Overholt, 2015, p. 83). This method consists of four stages: plan, do, study and act and it is ideal that this method is conducted initially on a small scale or temporary basis to trial any changes, evaluate the effects and then determine whether or not to move forward on a large scale, make further adjustments, or put the issue on hold (MeInyk & Fineout-Overholt, 2015, p. 83).

The PDSA model was an appropriate for this scholarly project as the purpose was to identify potential opportunities for the network to improve the screening process for depression and suicide among all individuals presenting to the Emergency Department. There currently is not a policy within the network organization that addresses screening; however, the organization has implemented a three-item questionnaire that registered nurses ask individuals during the admission or triage process. These questions inquiry about whether or not the individual has felt little or had no interest or pleasure in doing things within the past week, if the individual has felt

down, depressed or hopeless within the past 2 weeks, and if the individual felt like ending his or her life today (during this visit). Depending on how the individual answers these questions, no additional resources are provided, and the individual may not be flagged or identified as being at risk.

The questions currently used within the organization are valid questions derived from the Patient Health Questionnaire-9 (Figure 10); however, given that there are many symptoms of depression, an individual can easily not be properly screened. This is even challenging for the registered nurse and/or advanced practice provider completing the admission/triage process if he or she lacks knowledge about the condition, are unsure of how to ask or explain the questions to the individual, personal experience or beliefs and/or lack of training.

Stages of the PDSA method consists of:

Plan. This was the first stage in which the author identified that the organization should evaluate current screening process in regard to depression and suicide among individuals presenting to any of the network Emergency Departments. Before implementing a policy or improving the process, it was decided to first evaluate what the registered nurses and advanced practice providers know, believe, or their attitude about depression and suicide. Therefore, the objective was to survey registered nurses and advanced practice providers on literacy and knowledge.

Do. This stage consisted of conducting a 3-part survey via Survey Monkey to include demographics data, depression literacy and knowledge about depression and suicide questions using the Likert Scale.

Study. This was the stage in which the data was analyzed and summarized with recommendations to the organization to provide continuing education to current staff as well as developing training for new staff on depression screening and how to use the current tool for all patients.

Act. At this point of the method, the organization could decide to act on the recommendations provides based on the analyzed data which can include an opportunity for continuing education, awareness and policy development.

Setting. The setting for implementation of the project were the Emergency Departments and standalone centers within the network organization. The organization consists of 4 hospital-based Emergency Departments and 2 standalone emergency centers that employee approximately 1600 registered nurses and 600 advanced practice providers across the network. The facilities see over 34,000 individuals a year serving all ages.

Sample. The organization employees over 2000 registered nurses and advanced practice providers. Therefore, the author estimated a sample size of approximately 100 individuals who would volunteer to participate. The only criteria were that the participant must be a registered nurse and/or advanced practice provider and must be employed in the Emergency Department or work with Emergency Department patients within the organization.

Measurement methods/tools. The author conducted a three-part survey to registered nurses and advanced practice providers within the network organization via SurveyMonkey with questions about demographic data, literacy about mental health, and attitude towards depression utilizing the Depression Literacy Questionnaire (D-Lit) developed by Griffiths (Figure 3) and the Revised Depression Attitude Questionnaire by Haddad (Figure 4) (permission granted Figure 6

and Figure 7). The survey remained open over a 2-week timeframe with the results analyzed by the author.

The survey consisted of three parts with section one collecting demographic data on gender, title, years of experience in an Emergency Department setting, whether or not the participant had personal experience of dealing with depression and/or suicide with a family member or friend, and whether or not the participant has cared for a patient in the Emergency Department who has attempted or committed suicide. Section two consisted of the Depression Literacy Questionnaire (Figure 3) that assessed the participants mental health literacy specifically as related to depression which was a True or False questionnaire that identified what the participants knew about depression. Section three was the final aspect of the survey that consisted of questions from the revised Depression Attitude Questionnaire (R-DAQ) (Figure 4) that measured the participants attitude towards depression using the Likert scale. The results from sections 2 and 3 identified deficiencies and potential areas that the organization could use to address improving the screening process for depression and suicide among all individuals who present to an Emergency Department.

Ethical Considerations

This scholarly project did not access any patient data or electronic health records. The survey was conducted electronically and anonymously to also protect the interest of employees who participated in this study. The leadership team at each facility sent out the survey anonymously to the registered nurses and advanced practice providers in which the results were collected via SurveyMonkey. The author did not have access to email addresses, names or IP addresses of any volunteering participants. The author included verbiage about the ability to copy and paste the URL into a separate browser for added protection or a QCR code could be scanned from a mobile device. There was also verbiage at the beginning of the survey in which the volunteering participant agreed to before completing the survey that served as his or her consent to participate.

The quality improvement project was presented to Wright State University's Institutional Review Board (IRB) and was ruled as being exempt from IRB review in accordance with federally defined categories of exempt review per 45 CFR 46.104 and Wright State University IRB policies which is shown in Figure 5.

Section Four: Findings

Results/Outcomes

Demographics. The demographic section of the survey consisted of the consent (Figure 8) to participate, gender, job title, years of experience and whether or not the participant had personal experience with a family member or friend who has suffered from depression, attempted or committed suicide. As shown in Table 3, a total of 56 participants consented to participate in the survey in which 92.9% (n=52) were female and 7.1% (n=4) were male. Of the

56 participants, 98.2% (n=54) identified as Registered Nurses, 1.8% (n=1) as an Advanced Practice Provider and one individual skipped answering this question. The number of years of experience in the Emergency Department indicated that 8.9% (n=5) had less than 1 year, 39.3% (n=22) had 1-5 years, 16.1% (n=9) with 6-10 years, and 35.7% (n=20) had 10+ years. Lastly, 64.3% (n=36) of the participants indicated that he or she had a personal experience with depression and/or suicide and 71.4% (n=40) have cared for a patient who had committed suicide in an Emergency Department setting.

Depression literacy. Section two of the survey consisted of 22 questions derived from the Depression Literacy Questionnaire (Figure 3) developed by Griffiths and scored based on True or False answers. A high score indicates that the participants have a good literacy knowledge about depression. Of the 56 individuals who agreed to participate in the study, only 53 completed the depression literacy questionnaire and the average score was 83%. A breakdown of the results as shown in Table 4 shows there were six items that were identified with results less than the average score and centered around questions addressing the effectiveness of counseling and treatment options, who can prescribe antidepressants, and whether or not behavior or having several personalities are signs of depression.

Depression attitude. The final section of the survey covered the attitudes and beliefs of the participants about depression. There was a total of 23 questions; however, 22 were derived from the Revised Depression Attitude Questionnaire (Figure 4) developed by Haddad. On average, 50 of the 56 participants answered the Depression Attitude Questions that were scored using the Likert system. A total of 11 questions were reversely scored due to negative wording. Each statement was scored on a 1-5 scale using the categories strongly disagree (1), disagree (2), neither agree or disagree (3), agree (4), or strongly agree (5). The average score of the weighted

results was 3.9. The final question on the survey inquired if the participants were comfortable in using the current screening questions for depression and/or suicide within their facility and the weighted average response indicated that 3.9 felt comfortable.

Discussion/Conclusions

The overall results for the depression literacy questions indicate that the registered nurses and advanced practice providers who participated had a good understanding about mental health conditions; however, given that the majority of the respondents had either 1-5 years or 10+ years of experience working in the Emergency Department with a score of 83% could lead one to believe that possibly a refresher or continuing education about mental health conditions could be beneficial for the organization to consider. The organization could incorporate training that the staff can review as part of the annual competencies to help maintain his or her literacy about mental health conditions.

The results on the depression attitude questionnaire had a weighted average score of 3.9 (out of a score of 5) which indicates that the majority of the respondents scored closely to agreeing on all the statement items which is a good indicator that these individuals have positive attitudes and/or beliefs in dealing with depressed individuals. Two items from the 22 questions had weighted averages in which the participants clearly indicated that he or she neither disagreed or agreed with the statements evolving around if he or she felt that the profession was well placed to assist patients with depression or was well trained to assist patients with depression. However, the overall weighted average clearly indicated that for the most part, the attitude and beliefs about depressed individuals were favorable which could mean that there are no particular biases when it comes to screening or working with individuals who present with depressive symptoms and/or complaints.

There was one question on the survey in which the participants were given a statement about whether or not it was rewarding to spend time looking after depressed individuals and the overall weighted average for this particular question was 2.7%. This could indicate that of the 50 participants who completed this question item answered between the disagree and neither agree nor disagree category. This could potentially be an issue that can affect the screening process.

Limitations

There were some limitations to this study that could have impacted the overall results. The invitation to participate in the study was distributed by the organizations' leadership team for each facility. Some participants were notified via e-mail and others were potentially notified or asked to participate during huddle sessions or through other participants and this could have affected the number of individuals who participated. The author was not involved in distributing invitation to participate therefore making it challenging to track how many were invited to participate. The demographics section should have included collecting data on the participants assigned facility as this data could have allowed the author to follow up with the leadership team of the facilities with low participation and to see if the responses were differently across the network. There were also concerns about whether or not all staff members regularly checked his or her email regularly and this may have caused some individuals to miss the opportunity to participate.

Other limitations included that the survey was open for only 13 days and this may not have allowed enough time for more to participate. There was a low number of responses from Advanced Practice Providers which was most likely due to the fact that those who work in the Emergency Department are not employed by the organization nor do they conduct the initial triage process with patients which is the opportunity when individuals are typically screened for

depressive symptoms and/or suicidality. Any future studies should take these limitations into consideration.

Section Five: Recommendations and Implications for Practice

Project Summary

Overall, this quality improvement project did provide insight on what the respondents knew about depression and his or her attitude about screening individuals for symptoms. Even though only 19% (n=56) of the 300 staff members participated, there were some limitations that may have affected the score in the depression literacy quiz. The results indicate that there is room for improvement to help increase knowledge about depression. Considering that depression and suicide is a growing and ongoing public health issue that needs addressing on a regular basis, incorporating some aspect of annual training or a competency can help to keep staff members up to date on depression literacy.

The staff appears to have a favorable attitude towards individuals with symptoms of depression; however, it was concerning that the average weighted score for the statement about whether or not the respondents felt it rewarding to spend time looking after depressed individuals was low. It can be interpreted that this low response could be linked to the two items where the respondents identified that he or she did not feel that the profession was well trained or well placed to assist patients with depression. This is another indication the staff could benefit from ongoing education on this topic. The survey results also identified that there could be some concerns about how well the staff felt about using the current screening method for depression and suicide. Even though the weighted average score was 3.9, it was still less than the respondents agreeing or strongly agreeing that there is a level of comfort.

The organization currently utilizes the Patient Health Questionnaire-2 (PHQ-2) as shown in Figure 9 which is often used as a first step approach screening method. Depending on how the response, an at risk individual may not be properly identified for referral to a mental health professional for treatment options or resources. This is a potential area where the staff may not feel well trained or prepared to utilize the current screening tool and this provides an opportunity for the organization to evaluate if using a more in-depth screening tool such as the Patient Health Questionnaire-9 (PHQ-9) as shown in Figure 10 would be a more effecting screening tool to use in the Emergency Department setting.

The network organization does use the PHQ-9 (Figure 10) questionnaire but only if the individual responds negatively to the questions on the PHQ-2 (Figure 9). Removal of PHQ-2 (Figure 9) will allow staff members to have direct access to the more descriptive statements on the PHQ-9 (Figure 10) and may help the staff to feel more comfortable in conducting the screening process. Additionally, as Emergency Departments usually have a mental health team or professional staffed in the department, scoring results from the PHQ-9 (Figure 10) could potentially allow for individuals to receive treatment or resources during the visit (Kroenke & Spitzer, 2002).

Implications for Nursing Practice and to the DNP Essentials

The two specific objectives identified in this quality improvement project were met as the survey was implemented and results analyzed discussing the areas of improvement and strengths. Recommendations for moving forward based on the survey results of the quality improvement project is that the organization should work to develop ongoing literacy training that could be offered annually to current and new staff and to consider replacing the current PHQ-2 (Figure 9) screening tool with the PHQ-9 (Figure 10). Implementing these changes can eventually help to

improve literacy among staff members, improve comfortable level in staff conducting the screening and help to improve patient outcomes to address this public health crisis. Additional recommendations include developing a policy that all individuals who present to the Emergency Department regardless of chief complaint are thoroughly screened for depression and suicide with the potential to receive treatment options or resources especially among individuals who present without a primary care provider who can manage or monitor depressive symptoms.

This project was able to fulfill five of the eight DNP essentials as outlined by the American Association of Colleges of Nursing (AACN):

DNP Essential I: Scientific Underpinnings for Practice. This essential focused on promoting the well-being and optimal functioning of individuals and to enhance the delivery of healthcare (AACN, 2006). This DNP project fulfilled this essential by helping to educate healthcare professionals about depression and why it is important to screen all individuals.

DNP Essential II: Organization and Systems Leadership for Quality Improvement Systems Thinking. This essential focused on being accountable for quality health care and patient safety (AACN, 2006). This essential was addressed in the DNP project through surveying the staff to identify potential barriers, lack of knowledge and/or areas of improvement that may be impacting how individuals are screened for depression in the emergency department setting. Lack of knowledge about a condition or disease process put individuals at risk of being misdiagnosed or untreated.

DNP Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice. This essential included working on methods to promote safe and effective care (AACN, 2006). Implementation of this DNP scholarly project enabled the author to collect data from

healthcare professionals that could potentially identify barriers or educational needs to help improve the screening process for individuals with depressive symptoms that present to an emergency department with complaints other than depression.

DNP Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes. Essential VI included the importance of effective communication and collaboration among the healthcare team to provide care (AACN, 2006). In the emergency department, there are physicians, advanced practice providers, nurses and mental health professionals who can work together to identify individuals at risk for depression and then provide treatment options/resources to help improve patient health outcomes.

DNP Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health. One of the focuses of this essential centered around improving public health, health promotion and prevention (AACN, 2006). Depression is a public health concern that is affecting millions of adolescents and adults. This project served to bring awareness about this condition among healthcare professionals in order to improve screening processes in the emergency department among all individuals regardless of the presenting complaint. Screening all individuals at every point of contact will enable professionals to identify individuals at risk and be able to provide treatment options/resources to help improve health outcomes.

Identify Methods for Dissemination

The results from this quality improvement project will be disseminated at the upcoming shared governance meeting with the network organization and to the Emergency Department leadership team. It was decided to present the results and recommendations during these meetings as the organization is interested in identifying any potential areas for improvement to

the screening process and this is the venue in which decisions are made to implement any potential changes. The leadership will also consist of the educators for each facility who can work on any new or revised training materials to share with the staff. The author would also like to work with the emergency medicine groups to see if the advanced practice providers can be invited to participate in completing the depression literacy and depression attitude questionnaires.

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Appendix A

Table 1. The Essentials of Doctoral Education for Advanced Nursing Practice

<u>Essential</u>	<u>Focus</u>
I. Scientific Underpinnings for Practice	<ol style="list-style-type: none"> 1. Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice. 2. Use science-based theories and concepts to: <ul style="list-style-type: none"> • determine the nature and significance of health and health care delivery phenomena; • describe the actions and advanced strategies to enhance, alleviate, and ameliorate health and health care delivery phenomena as appropriate; and • evaluate outcomes. 3. Develop and evaluate new practice approaches based on nursing theories and theories from other disciplines.
II. Organizational and Systems Leadership for Quality Improvement and Systems Thinking	<ol style="list-style-type: none"> 1. Develop and evaluate care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences, as well as organizational, political, and economic sciences. 2. Ensure accountability for quality of health care and patient safety for populations with whom they work. <ol style="list-style-type: none"> a. Use advanced communication skills/processes to lead quality improvement and patient safety initiatives in health care systems. b. Employ principles of business, finance, economics, and health policy to develop and implement effective plans for practice-level and/or system-wide practice initiatives that will improve the quality of care delivery. c. Develop and/or monitor budgets for practice initiatives. d. Analyze the cost-effectiveness of practice initiatives accounting for risk and improvement of health care outcomes. e. Demonstrate sensitivity to diverse organizational cultures and populations, including patients and providers. 3. Develop and/or evaluate effective strategies for managing the ethical dilemmas inherent in-patient care, the health care organization, and research.
III. Clinical Scholarship and Analytical Methods for Evidence-Based Practice	<ol style="list-style-type: none"> 1. Use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. 2. Design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends. 3. Design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. 4. Apply relevant findings to develop practice guidelines and improve practice and the practice environment. 5. Use information technology and research methods appropriately to: <ul style="list-style-type: none"> • collect appropriate and accurate data to generate evidence for nursing practice • inform and guide the design of databases that generate meaningful evidence for nursing practice • analyze data from practice • design evidence-based interventions • predict and analyze outcomes • examine patterns of behavior and outcomes • identify gaps in evidence for practice 6. Function as a practice specialist/consultant in collaborative knowledge-generating research. 7. Disseminate findings from evidence-based practice and research to improve healthcare outcomes
IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care	<ol style="list-style-type: none"> 1. Design, select, use, and evaluate programs that evaluate and monitor outcomes of care, care systems, and quality improvement including consumer use of health care information systems.

	<ol style="list-style-type: none"> Analyze and communicate critical elements necessary to the selection, use and evaluation of health care information systems and patient care technology. Demonstrate the conceptual ability and technical skills to develop and execute an evaluation plan involving data extraction from practice information systems and databases. Provide leadership in the evaluation and resolution of ethical and legal issues within healthcare systems relating to the use of information, information technology, communication networks, and patient care technology. Evaluate consumer health information sources for accuracy, timeliness, and appropriateness.
V. Health Care Policy for Advocacy in Health Care	<ol style="list-style-type: none"> Critically analyze health policy proposals, health policies, and related issues from the perspective of consumers, nursing, other health professions, and other stakeholders in policy and public forums. Demonstrate leadership in the development and implementation of institutional, local, state, federal, and/or international health policy. Influence policy makers through active participation on committees, boards, or task forces at the institutional, local, state, regional, national, and/or international levels to improve health care delivery and outcomes. Educate others, including policy makers at all levels, regarding nursing, health policy, and patient care outcomes. Advocate for the nursing profession within the policy and healthcare communities. Develop, evaluate, and provide leadership for health care policy that shapes health care financing, regulation, and delivery. Advocate for social justice, equity, and ethical policies within all healthcare arenas.
VI. Interprofessional Collaboration for Improving Patient and Population Health Outcomes	<ol style="list-style-type: none"> Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standards of care, and/or other scholarly products. Lead interprofessional teams in the analysis of complex practice and organizational issues. Employ consultative and leadership skills with intraprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems.
VII. Clinical Prevention and Population Health for Improving the Nation's Health	<ol style="list-style-type: none"> Analyze epidemiological, biostatistical, environmental, and other appropriate scientific data related to individual, aggregate, and population health. Synthesize concepts, including psychosocial dimensions and cultural diversity, related to clinical prevention and population health in developing, implementing, and evaluating interventions to address health promotion/disease prevention efforts, improve health status/access patterns, and/or address gaps in care of individuals, aggregates, or populations. Evaluate care delivery models and/or strategies using concepts related to community, environmental and occupational health, and cultural and socioeconomic dimensions of health.
VIII. Advanced Nursing Practice	<ol style="list-style-type: none"> Conduct a comprehensive and systematic assessment of health and illness parameters in complex situations, incorporating diverse and culturally sensitive approaches. Design, implement, and evaluate therapeutic interventions based on nursing science and other sciences. Develop and sustain therapeutic relationships and partnerships with patients (individual, family or group) and other professionals to facilitate optimal care and patient outcomes. Demonstrate advanced levels of clinical judgment, systems thinking, and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes. Guide, mentor, and support other nurses to achieve excellence in nursing practice. Educate and guide individuals and groups through complex health and situational transitions. Use conceptual and analytical skills in evaluating the links among practice, organizational, population, fiscal, and policy issues.

Appendix B

Table 2. Literature Review Table

<u>Authors/Year</u>	<u>Title</u>	<u>Purpose</u>	<u>Sample Size</u>	<u>Outcomes/Implications</u>	<u>Level of Evidence</u>
Abar, B., et al. (2017)	Depression and anxiety among emergency department patients: Utilization and barriers to care	Relationship of anxiety and depression for ED patients and perceived barriers to care	Convenience sample of adults 45-85 years old 251 enrolled	10% severe anxiety 12% moderate or severe depression Numerous visits to ED for individuals with severe anxiety and depression Perceived barriers 3x higher for individuals who presented with both anxiety and depression Anxiety and depression are growing concerns Difficult to treat and exacerbated by barriers to care Most EDs do not screen for mental health issues unless that is the presenting chief complaint ED can be 1 st point of intervention for at risk individuals ED providers can offer referrals/consultations and potentially reduce repeat ED visits	V
Abar, B., et al. (2017)	Access to care and depression among emergency department patients	Establish prevalence of potential barriers to care among ED patients and how those barriers relate to depression	636 participants	Mild or greater depression was 42% Majority reported barriers to care Feeling that doctor not responsive to concerns Depression more common in the ED than general population associated with poorer treatment outcomes, longer length of stay and repeated ED visits Patient care impacted as providers are too busy Embarrassment about the illness is also a perceived barrier	V
Almanzar, S., et al. (2014)	Knowledge of and attitudes toward clinical depression among health providers in Gujarat, India	Study to explore the knowledge and attitudes towards diagnosing and treatment of clinical depression by non-psychiatric providers	Cross-sectional survey over 4 weeks among physicians and community health workers	Considerable stigma and misinformation about depression among health care workers in India Community health workers difficulty defining depression and large majority never heard about depression or believe it was related as a punishment from God Community workers less able to describe clinical depression than physicians Stigma against medical illness posed a barrier to recognition and care Mental health illiteracy and misconception of mental illness was low – some participants never heard of the condition Poverty, culture and treatment-seeking behavior and limited mental health services are also potential barriers to care	V
Betz, M.E et al. (2016)	Managing suicidal patients in the emergency department	N/A	N/A	Providing care is challenging due to time pressures, boarding, beds and difficulty predicting self-harm 8% of all adults ED patients have had suicidal ideation or behaviors Joint Commission requires screening for suicide for patients with emotional, behavioral disorders, or presenting symptoms Targeted screening can help to fulfill this mandate	V

				Early screening does identify those at risk	
Bost, N., et al. (2018)	Clinician perspectives of a mental health consumer flow strategy in an emergency department	Explored clinician perceptions regarding implement of a mental health flow strategy	Qualitative study Four emergency and four mental health clinicians	Complex to introduce new process to facilities Consumer flow strategy supported by clinicians Interdepartmental communication and education need on a regular basis to review processes	V
Boudreaux, E.D., et al. (2016)	Improving suicide risk screening and detection in the emergency department	Examines whether universal suicide risk screening is feasible and effective	Three-phase timed series design 8 EDs/7 states 2009-2014	+ feasibility and increased noted in risk detection Huge impact for public health as is necessary first in order to lead towards prevention Many ED patients have unrecognized risk incidental to the presenting chief complaint Many who die by suicide did not present to the ED for a psychiatric problem Increased screening led to 2x more identified at risk	
Burcusa, S.L., et al. (2007)	Risk for recurrence in depression	Study to identify risk factors for recurrent depression	Identified over 3000 adolescents and adults with recurrent depression	Highly recurrent disorder Affects 1:6 men and 1:4 women during lifetime Significant personal and public health concerns Significant economic impact – decreased productivity – costs 16.3 billion Recurrent depression is very common and can be due to various reasons	
Camilli, V., et al. (2005)	Emergency department nurses' attitudes toward suspected intoxicated and psychiatric patients	N/A	N/A	Very little qualitative and quantitative data in the United States – mainly done in United Kingdom, Australia, Canada and Asia 6/10 ED physicians report upsurge in ED visits for mental illness General attitude of staff that care wastes valuable time, time consuming Report do not feel properly trained to handle psychiatric patients Healthcare workers must provide the best and safest care to all patients	V
Cepoiu, M., et al. (2007)	Recognition of depression by non-psychiatric physicians -A systematic literature review and meta-analysis	Summarize recognition of depression by non-psychiatric physicians	85 studies initially – 49 excluded 36 finally reviewed 2000-2005	Depression most prevalent disease of 21 st century Important public health issue Less than half of depressed patients recognized by physician There should be a standardized method of documenting non-psychiatric physicians' recognition of depression Large number of potential barriers to recognition and treatment of depression were identified in this study Accuracy of recognizing depression by non-psychiatric physicians is low	I
Chang, B., et al. (2011)	The depressed patient and suicidal patient in the emergency department: Evidence-based management and treatment strategies	Examine risk factors in depression and suicide in patients presenting to the ED	Literature review 555 review initially but reduced to 14 summaries selected from 1980-2011	Evidence is limited to guide management of depression and suicidal patients in the ED No standardized guidelines for ED patients Symptoms of depression may manifest as physical ailments Critical that patients are assessed and evaluated Important that every ED develop a policy and procedure for assessing and managing patients who are a suicide risk Numerous risk management pitfalls noted Depression can be with or without suicidal features Emergency clinician should have a flexible and compassionate approach to the patient	V

				with a focus on safety and overall functioning	
Chun, T.H., et al. (2013)	Emergency department screening for adolescent mental health disorders: The who, what, when, where, why and how it could and should be done	Discuss the importance of screening adolescents for mental health	N/A	ED ideal site for screening Pediatric ED patients at higher risk for mental health problems ED visit is one of the few opportunities to identify and intervene with children and adolescents Feasible and acceptable to patients and parents Mental health major contributor to a global burden of disease Affects 120 million people worldwide \$58 billion health care cost \$193 billion lost earnings ED screening is acceptable to adolescents and their parents	V
Clarke, D., et al. (2014)	Emergency department staff attitudes towards mental health consumers: A literature review and thematic content analysis	Assess staff attitude about mental health patients	Literature review from 1995-2011 from English articles – 796 references regarding the topic but only 42 met exclusion criteria	Positive and negative perceptions from consumers – negative > positive No consistent regarding the staffs' perception Further education needed for staff – increased knowledge about condition can be beneficial to all individuals	V
Da Cruz, D., et al. (2011)	Emergency department contact prior to suicide in mental health patients	To describe attendance at emergency departments in the year prior to suicide for a sample of mental health patients	Case review 286 individuals who died within 12 months of mental health contact in North West England from 2003-2005	124 individuals had attended ED at least once in the year prior to death 35 had attended the ED on more than three occasions EDs may represent an important additional setting for suicide prevention in mental health patients Clinicians should be alert to the risk associated with such presentation and to the possible association between frequent attendance and suicide Best practice guidelines recommend that all self-harm patients attending the ED receive a psychosocial assessment Training should address any negative attitudes staff have towards self-harm as this can have a negative impact on assessment and treatment ED play a role in reducing suicide risk	V
Diamond, G.S., et al. (2012)	Attitudes, practices, and barriers to adolescent suicide and mental health screening: A survey of Pennsylvania primary care providers	To determine primary care providers rates of screening for suicide and mental health problems in adolescents and the factors that promote or discourage this practice	671 medical professionals (pediatricians, family physicians, nurse practitioners, physician assistants) 53 item survey	Well visits: 67% screened for mental health and 35.2% screened for suicide risk 61.1% rarely screened for suicide or only when it was indicated 14.2% used a standardized suicide screening tool 90% stated parent involvement was needed if adolescents were to follow through with referrals to mental health services Joint Commission on Accreditation of Healthcare Organizations recommends that all patients receiving care in an ambulatory setting should be assessed for suicide risk 25.5% reported adequate training in adolescent suicide risk assessment 32.9% reported adequate knowledge 64.2% reported feeling comfortable talking about suicide with adolescents 58.4% comfortable with breaking confidentiality if needed Suicide and depression screening together improve efficiency Few providers follow recommendations	V

				Barriers: limited knowledge, lack of reimbursement for screening, and poor availability of behavioral health services	
Dobscha, S.K., et al. (2001)	Effectiveness of an intervention to improve primary care provider recognition of depression	To determine whether limited follow-up of positive findings on depression screening improves provider recognition and initial management of depression	Before-after study Primary care clinic 160 patients over a 3-month timeframe (1999)	Many institutions are implementing screening programs in the clinical setting Providers under pressure to address multiple and complete health care issues – places a lower priority on depression screening than other clinical activities Providers may not have the knowledge, skills, or confidence necessary to act on screening results Providers may not always document actions after assessing patients Simple intervention can improve provider performance in identifying and managing depression	V
Gairin, I., et al. (2003)	Attendance at the accident and emergency department in the year before suicide: A retrospective study	To determine the number of suicide patients that were in the emergency department the previous year before death	Retrospective study of a 38-month period in England and Wales 219 suicides 16-93 years old	Only 15% had been seen by accident or in the ED prior to death Not enough information to decipher if attendance prior was a factor	V
Hoyer, D., et al. (2007)	Screening for depression in emergency department patients	Evaluate the prevalence of emergency department patients who have the symptoms of depression	Prospective observational study over a 9-month period 505 patients screened from April-December 2004	109 screened positive for depression symptoms (21.6%) About 1/5 ED patients suffer with depression Emergency physicians should have a working knowledge of DSM-4 criteria Good studies are needed to validate the optimal way to manage depression in ED patients Lack of data available to determine if screening in the ED improves outcomes	V
Ingram, W.M., et al. (2017)	Depression linked to frequent emergency department use in large 10-year retrospective analysis of an integrated health care system	Evaluated general patient features related to depression and frequency of ED use in a large integrated health care system	287,281 adult HER records studied over a 10-year period	Patients with ED were more likely to be seen in the ED and at a higher frequency than others Poorly managed depression may be playing a role in frequent ED visits which can be addressed via depression screening ED visits typically for various acute or chronic pain conditions Suggested for enhanced screening, consideration, and improved management interventions for depression in the ED	V
Innes, K., et al. (2013)	Caring for the mental illness patient in emergency departments – an exploration of the issues from a healthcare provider perspective	Identify issues from ED clinicals about the management of patients in the ED with mental illness	Mixed method study (surveys and focus groups)	Large tertiary hospital with 24-hour ED Mental health available at all times 36 ED and 12 MH participants 61 members responded Staff education was concerning Some staff form inaccurate perception Lack of preparedness affects care for mental health patients ED nurses unfamiliar and not prepared to take care of mental health patients Need for education, improved communication, assessment and management	V
Babcock Irvin, C., et al. (2000)	Preventive care in the emergency department, Part II: Clinical preventive services – an emergency medicine	To identify primary and secondary intervention appropriate for management in the ED	Systematic review 17 candidate preventive interventions	Beta or gamma rating that there is not enough evidence to recommend for or against depression screening in the ED	I

	evidence-based review				
Kessler, R.C. (2012)	The costs of depression	Discuss costs associated with depression	Survey	Depression is a burdensome condition Affects role performance, marital quality, work performance and financial success Relevant to show the effects of depression	V
Kessler, R.C., et al. (2013)	The epidemiology of depression across cultures	Discuss the burden of depression	Survey	4 th leading cause of disability worldwide 2 nd leading cause by 2020 Median age of onset mid 20s Gender, age and marital status associated with depression Women two-fold increased risk Separated or divorced greater risk Adverse consequences: education, marital timing and stability, teen childbearing, and occupation (unemployment and job loss) Commonly occurs and is a seriously impairing disorder Randomized controlled trials are needed to increase our understanding of the effects of detection and treatment of major depression	V
Khav, N., et al. (2013)	Depression symptoms and risk factors in adult emergency department patients: A multisite cross-sectional prevalence survey	Identify proportion of individuals who utilize an ED and test positive for depression	Cross-sectional survey of ED patients 350 ED patients 71.6% participation rate	50 screened positive – self-reported or previous history of depression ED patients' higher risk of depression ED based depression screening can increase early detection and management More research and validation needed for ED-based depression screening and tools 12% of ED patients with depression had a suicide attempt in the past 75% of individuals who committed suicide saw a healthcare provider within the last year of their life including being seen in an ED Less than 1/3 receive mental health treatment ED-based depression screening can yield an overall benefit to the general population	V
Knaak, S., et al. (2017)	Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions	Overview of barriers to access and quality care due to stigmatization	N/A	Stigma occurs on multiple levels – intrapersonal, interpersonal and structural # of issues attached to stigmatization in healthcare Patients feel devalued, dismissed and dehumanized by health professionals Systemic problem – stigmatism exists across the healthcare spectrum Common themes – burnout, compassion fatigue, lack of awareness, pessimistic views, lack of skills and healthcare professional uncomfortable about discussing or disclosing their own mental illness Stigma affects patient safety	V
Kowalenko, T., et al. (2004)	Should we screen for depression in the emergency department?	Commentary to discuss importance of screening	N/A	Significant and underappreciated fact for ED patients ED important location for identifying those at risk and making referrals Many patients lack access to health services Missed opportunity if screening and diagnosing does not take place in the ED Patient consequences for missed opportunities – death and decreased quality of life Suicide 8x greater in individuals with depression Not enough evidence to recommend for or against screening; however increasing amount of ED populations, suffering and successful screening in other settings warrant for evaluation of the benefits from an ED standpoint	VI

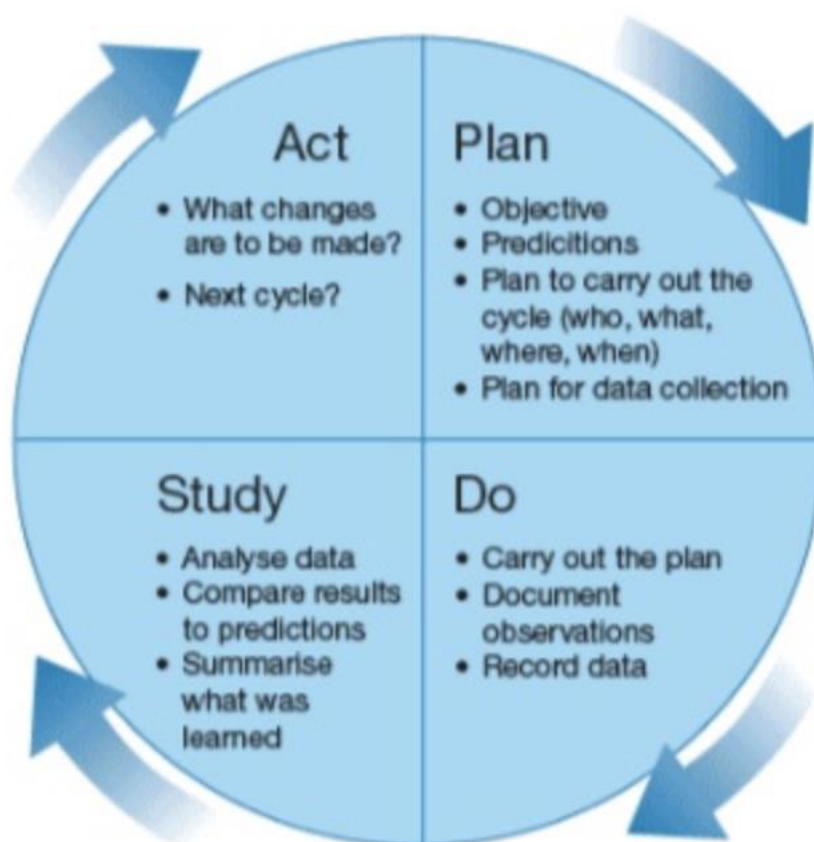
Liu, S., et al. (2008)	Non-psychiatric physicians' knowledge, attitudes and behavior toward depression	Assessed self-reported knowledge, attitudes and treatment practices of non-psychiatric physicians in regard to depression	Survey questionnaire 524 non-psychiatric physicians 375 completed surveys (72%)	Many not confident with treatment depression Incomplete knowledge and/or training – major barriers Substantial suffering for patients/families – lost productivity and increased risk for suicide 22 item knowledge scale	V
Lopez, V., et al. (2018)	Depression screening and education: an examination of mental health literacy and stigma in a sample of Hispanic women	Identify barriers to depression treatment and stigma among the Hispanic population	319 Hispanic females using PHQ-9 over a 24-month timeframe	Primary care settings are the prime time to screen for mental health disorders and improve quality of care Labeling, assumptions and mistreatment of individuals with mental health illnesses can play an important role in provider and system-level barriers Good; however, limited to the Hispanic population only Lack of knowledge to understanding the components of mental health literacy according to Jorm's framework Depression Knowledge Measure (DKM) can be used to assess knowledge and treatment options for depression among healthcare providers Healthcare providers should understand and recognize the stigma associated with mental illness Importance for a culturally effective patient-centered environment to help address the myths and stigmas about depression/mental health	V
Marynowski-Traczyk, D., et al. (2011)	What are the experiences of emergency department nurses in caring for clients with a mental illness in the emergency department?	Gain an understanding of the experiences of ED nurses caring for clients with mental illness	Interpretative study 6 ED RN (Australian) Semi-structured interview – 5 questions	Issues: time, environment, and understanding the client's journey Increased mental health presentation to Australian EDs Nurses lack training and confidence ED is high stimulus and mental health patients need a low stimulus, quiet environment Increasing numbers in the ED will require EDs to be able to cater to mental health patients	V
Mbatia, J., et al. (2009)	Knowledge, attitudes and practice pertaining to depression among health care workers in Tanzania	Assess health worker's knowledge and attitude about the cause, consequences and treatment of depression	Depression Attitude Questionnaire 14 workers in 4 primary care centers in Tanzania	Believed that depression rates have increased, and life events play an important role in depression Feel that people with poor stamina from life events cause depression Need to strengthen training among primary care workers about mental health illnesses Depressive illness is underdiagnosed and undertreated in primary care worldwide	V
Nutting, P.A., et al. (2002)	Barriers to initiating depression treatment in primary care practice	Examine reasons primary care physicians and nurse's inability to initiate guideline-based care for patients with major depression	12 physicians 6 nurse care managers Surveyed about 64 patients Qualitative and quantitative	Barriers included: patient resistance to diagnosis or treatment, noncompliance with visits, physician judgment overruling guidelines, patient psychosocial problems and access to care and system barriers Physician barriers more related to the patient Physician do often make judgments about the care of depress patients but not frequently Physician education and management needed to increase patient acceptance of depressive conditions and priority towards treatment	V
O'Mara, R.M., et al. (2012)	Adolescent and parent attitudes toward	Investigated adolescent and parents' attitude	Questionnaires 294 adolescents 300 parents	Positive attitudes Many believe that screening should be done routinely	V

	screening for suicide risk and mental health problems in the pediatric emergency department	about being screened in the ED setting	13-17 years old	Barriers to screening include: time, space, funding, and staffing	
Rhodes, K.V. (2008)	Mood disorders in the emergency department: The challenge of linking patients to appropriate services	Discussion linking mood disorders and challenges in treating ED patients	Literature review	Increasing presentation of mental health illness in the ED – 15% between 1992-2000 Rarely detected if mental health is not a chief complaint 75% saw a provider within the last year of life <1/3 received mental health treatment Barrier is not only with screening but the ability to follow up due to barriers such as poor or being uninsured	V
Savoy, M., et al. (2016)	Screening your adult patients for depression	Discussion about screening patients	Expert opinion	Primary diagnosis for 8 million ambulatory visits to physician offices, hospital outpatient clinics, and emergency departments and 395,000 inpatient visits \$83 billion economic burden – mainly related to lost productivity No preferred screening tool recommended by the USPSTF Screening in a business practice can be challenging Screening can be an asset to patient-centered care	VI
Schumann, I., et al. (2011)	Physicians' attitudes, diagnostic process and barriers regarding depression diagnosis in primary care: a systematic review of qualitative studies	Study to investigate how family physicians (FPs) diagnose depression, their concepts and perceived barriers	Systematic Review 239 primary care providers – 13 qualitative studies (from 7 countries – 5 UK, 3 USA, 1 each Netherlands, Sweden, Australia, Canada and Germany participated in 13 studies)	Depressive disorders highly prevalent worldwide FPs over and under diagnose depression Different attitudes with respect to the understanding of diagnosing depression in the primary care setting Most considered the process as time consuming and needed multiple contacts with the patient Time is needed and could affect the entire schedule for the day Process is draining and somewhat frustrating Most believe patients reluctant to admit or accept diagnosis Patients unclear about symptoms FPs state not clear diagnostic tests to confirm diagnosis Patients' fear of potential stigma as a huge barrier FPs believe that time and resources are limited FPs need additional training on the screening process and have resources available to share with patients	I
Stuhlmiller, C.M., et al. (2004)	Increasing confidence of emergency department staff in responding to mental health issues: An educational initiative	Discuss how enhanced knowledge and skills of ED staff will increase confidence and competence of staff to care for patients with mental health illnesses	Questionnaire 192 emergency staff attended 8 courses Pre and post course questionnaires completed by 182 participants 40 medical staff/141 nurses/11 other qualifications	Self-reported data and interviews shows benefits that increased knowledge can be beneficial Decreases fear, increases confidence, competence and empathy toward mental health patients	V
Suokas, J., et al. (2009)	The attitudes of emergency staff	Compared attitudes of	Questionnaire	Providing a psychiatric consultation to patients did not affect the nurses attitude	V

	toward attempted suicide patients	emergency room staff towards patients who attempted suicide before and after getting a psychiatric consultation	Understanding Suicidal Patients (USP) scale 100 participants returned the survey	Attitudes of personnel are key elements influencing whether patients will commit suicide	
Winkler, P., et al. (2016)	Attitudes towards the people with mental illness: Comparison between Czech medical doctors and general population	Compare attitudes among individuals with mental illness as compared to Czech medical doctors and the general public	Community Attitudes towards Mentally Ill (CAMI) scale used 1810 Czech Republic 1200 Czech medical doctors	More favorable attitudes among medical doctors than the general public High stigma Stigma is an issue especially in general public Medical doctors more favorable perception Need additional information to gather more detail about aspects of stigma mechanisms and how to reduce stigmatization	V
Wolf, L.A., et al. (2015)	US emergency nurses' perceptions of challenges and facilitators in the management of behavioural health patients in the emergency department: A mixed-method study	Assess nurses' perceptions of skills, beliefs/attitudes, and confidence in caring for mental health patients	Mixed-method – survey (1229) and focus groups (20)	Lack of education, resources, and treatment options in order to deliver safe and effective care	V

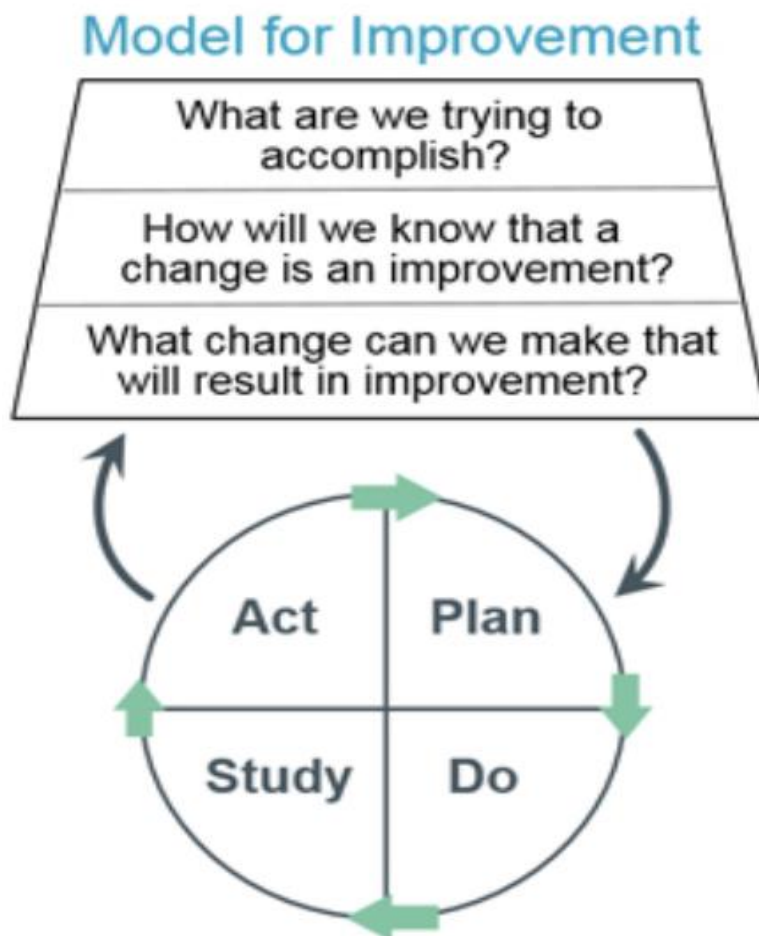
Appendix C

Figure 1. Plan-Do-Study-Act Cycle



Appendix D

Figure 2. Model for Improvement



Appendix E

Figure 3. Depression Literacy Questionnaire

Depression Literacy Questionnaire items

- People with depression often speak in a rambling and disjointed way. (False)
- People with depression may feel guilty when they are not at fault. (True)
- Reckless and foolhardy behaviour is a common sign of depression. (False)
- Loss of confidence and poor self-esteem may be a symptom of depression. (True)
- Not stepping on cracks in the footpath may be a sign of depression. (False)
- People with depression often hear voices that are not there. (False)
- Sleeping too much or too little may be a sign of depression. (True)
- Eating too much or losing interest in food may be a sign of depression. (True)
- Depression does not affect your memory and concentration. (False)
- Having several distinct personalities may be a sign of depression. (False)
- People may move more slowly or become agitated as a result of their depression. (True)
- Clinical psychologists can prescribe antidepressants. (False)
- Moderate depression disrupts a person's life as much as multiple sclerosis or deafness. (True)
- Most people with depression need to be hospitalised. (False)
- Many famous people have suffered from depression. (True)
- Many treatments for depression are more effective than antidepressants. (False)
- Counselling is as effective as cognitive behavioural therapy for depression. (False)
- Cognitive behavioural therapy is as effective as antidepressants for mild to moderate depression. (True)
- Of all the alternative and lifestyle treatments for depression, vitamins are likely to be the most helpful. (False)
- People with depression should stop taking antidepressants as soon as they feel better. (False)
- Antidepressants are addictive. (False)
- Antidepressant medications usually work straight away. (False)

Appendix F

Figure 4. Revised Depression Attitude Questionnaire

	Please read the statement and tick/click the box that relates best to your personal opinion	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
1	I feel comfortable in dealing with depressed patients' needs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Depression is a disease like any other (e.g. asthma, diabetes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Psychological therapy tends to be unsuccessful with people who are depressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Antidepressant therapy tends to be unsuccessful with people who are depressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	One of the main causes of depression is a lack of self-discipline and will-power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Depression treatments medicalise unhappiness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	I feel confident in assessing depression in patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	I am more comfortable working with physical illness than with mental illnesses like depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Becoming depressed is a natural part of being old	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	All health professionals should have skills in recognising and managing depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	My profession is well placed to assist patients with depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Becoming depressed is a way that people with poor stamina deal with life difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Once a person has made up their mind about taking their own life no one can stop them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	People with depression have care needs similar to other medical conditions like diabetes, COPD or arthritis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	My profession is well trained to assist patients with depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Recognising and managing depression is often an important part of managing other health problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	I feel confident in assessing suicide risk in patients presenting with depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Depression reflects a response which is not amenable to change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	It is rewarding to spend time looking after depressed patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Becoming depressed is a natural part of adolescence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	There is little to be offered to depressed patients who do not respond to initial treatments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Haddad et al (2015) The development and psychometric properties of a measure of clinicians' attitudes to depression: the revised Depression Attitude Questionnaire (R-DAQ). *BMC Psychiatry* 2015, 15:7

22 Anyone can suffer from depression ☐ ☐ ☐ ☐ ☐ ☐

Revised Depression Attitude Questionnaire (R-DAQ), Haddad et al 2015 ☐

Appendix G

Figure 5. IRB Approval

**WSU IRB STUDY EXEMPTION LETTER**

Office of Research and Sponsored Programs 3640 Colonel Glenn Hwy. Dayton, OH 45435-0001

Exemption date: March 7, 2019

PI: Alendre McGhee,
Doctor of Nursing Practice program

IRB #: 06639

**Exemption 2i
category:**

(937) 775-2425
fax: (937) 775-3781
rsp@wright.edu www.wright.edu

Title: Evaluating Healthcare Professionals' Knowledge, Beliefs, and
Understanding of the Importance of Evidence-Based
Depression and Suicide Screening: A Quality Improvement
Project

The WSU IRB has reviewed and determined that the above project is exempt from IRB review. This review and exemption approval were processed in accordance with federally defined categories of exempt review per 45 CFR 46.104 and WSU IRB policies.

Continuing review is not required for exempted studies. However, should your study significantly change, please contact the WSU IRB office prior to initiating those changes to assess whether the study will or will not continue to be exempt.

We appreciate the opportunity to evaluate this research and wish you success

with the project. Thank you,

The Wright State
University IRB
OHRP
#IRB00000034

Appendix H

Figure 6. Griffiths Consent

Wednesday, February 13, 2019 at 4:46:56 AM Eastern Standard Time

Subject: Re: Depression Literacy Questionnaire (D-Lit)
Date: Tuesday, November 20, 2018 at 6:28:21 PM Eastern Standard Time
From: Kathy Griffiths
To: McGhee, Alendre D.
Attachments: image001.png, D-Lit.doc

Dear Aldenre,

My apologies for the delay in replying.

You are most welcome to use the D-Lit (attached) for your study.

Good luck with your project.

Best wishes,

Kathy.

Kathleen Griffiths, PhD
ANU Emeritus Professor,
Research School of Psychology
College of Health & Medicine
The Australian National University.

From: "McGhee, Alendre D." <mcghee.125@osu.edu>
Date: Wednesday, 21 November 2018 at 9:32 am
To: Kathy Griffiths <kathy.griffiths@anu.edu.au>
Subject: Re: Depression Literacy Questionnaire (D-Lit)

Hello,

I was following up regarding the request to utilize the Depression Literacy Questionnaire for the DNP project I am conducting as a DNP student at The Ohio State University.

Thanks in advance for your time and consideration.



Alendre McGhee, MSN, APRN, CNP
Instructor of Clinical Practice
The College of Nursing
381 Newton Hall, 1585 Neil Avenue, Columbus, OH 43210

Appendix I

Figure 7. Haddad Consent

Wednesday, February 13, 2019 at 4:45:55 AM Eastern Standard Time

Subject: RE: Revised Depression Attitude Questionnaire (R-DAQ)
Date: Thursday, November 15, 2018 at 9:18:50 AM Eastern Standard Time
From: Haddad, Mark
To: McGhee, Alendre D.
Attachments: image004.png, image003.jpg, DAQPooled2011fampra.pdf, HaddadRDAQLahore2016.pdf, RDAQDevelopment2015.pdf, RDAQPsychometricsPakistan2017.pdf

Dear Alendre,

Yes certainly, you are welcome to use this scale.

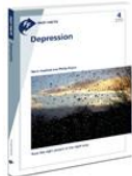
I am attaching relevant articles - the scale and all details of its use are contained in the open access **BMC Psychiatry** article <https://bmcpsy psychiatry.biomedcentral.com/track/pdf/10.1186/s12888-014-0381-x>

Hope your study goes well

Best wishes, Mark

Dr Mark Haddad
Senior Tutor for Research
Visiting Lecturer in Health Services Research
Centre for Health Services Research
School of Health Sciences
City, University of London
1 Myddelton Street
London EC1R 1UW

Tel: +44(0)20 7040 3521
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<http://dmtrk.net/Z25-57AUC-08C0I181F7/cr.aspx>

From: McGhee, Alendre D. <mcghee.125@osu.edu>
Sent: 13 November 2018 00:53
To: Haddad, Mark <Mark.Haddad.1@city.ac.uk>

Appendix J

Figure 8. Consent to Participate

Dear Emergency Department Registered Nurses & Advanced Practice Providers,

You are being invited to participate in a research study by completing a web-based survey about nurse perceptions regarding screening for depression and suicide ideation in the emergency department. This study is part of my requirements for completion of a Doctorate in Nursing Practice at The Ohio State University.

Evidence suggests that all patients should be screened for depression and suicide ideation at every point of contact with a health care professional. Your participation in this survey study may help improve patient outcomes in the future by helping to identify at risk individuals in the emergency department setting.

There are minimal risks associated with this study. You may experience minor discomfort based on the questions in the survey that ask you about your perceptions and attitudes regarding depression and suicide screening. Taking part in this study is voluntary. You may choose not to answer any question(s) on the survey that make you feel uncomfortable. You may withdraw from the study at any time. By choosing not to take part in the study, stopping the study at any time, or not answering all the questions, will not affect you in anyway. Results of the study will be reported in a summary format, therefore; your identity will remain anonymous. By completing this survey, you have agreed to take part in this research study. Survey data cannot be linked to you as an individual because no signature is required and IP addresses are not collected.

If you have any questions, concerns, or complaints about the research study, please contact: Alendre McGhee at 614-688-2093. If you have any questions about your rights as a research subject, you may call the Wright State IRB Office at (937) 775-4462. You can discuss any questions about your rights as a research subject with a member of the IRB or staff. The IRB is an independent committee made up of people from the University community, staff of the institutions, as well as people from the community not connected with these institutions. The IRB has reviewed this research study.

The link for this study is at <https://www.surveymonkey.com/r/OSUDNPproject> and should take you about 10 minutes to complete. You can also scan the QR code to complete the survey from a mobile device. Thank you for considering participation in this study.

The survey will remain open until Sunday, March 24, 2019.

Sincerely,

Alendre McGhee MSN, APRN-CNP
The Ohio State University College of Nursing



Appendix K

Table 3. Demographics

Demographics			
Gender		% Respondents	# Respondents
Male		7.1%	4
Female		92.9%	52
Occupation			
Emergency Department Registered Nurse		98.2%	54
Emergency Department Advanced Practice Provider		1.8%	1
Years of Experience in the Emergency Department			
<1 year		8.9%	5
1-5 years		39.3%	22
6-10 years		16.1%	9
10+ years		35.7%	20
Personal Experience with depression or suicide			
Yes		62.5%	36
No		35.7%	20
Cared for a patient in the ED who committed suicide			
Yes		71.4%	40
No		28.6%	16

Appendix L

Table 4. Depression Literacy Question Ranking Results

Question Ranking

Questions (22)	Difficulty	Average Score
Q22 Counseling is as effective as cognitive behavioral therapy for depression.	1	8%
Q21 Many treatments for depression are more effective than antidepressants.	2	9%
Q17 Clinical psychologists can prescribe antidepressants.	3	51%
Q8 Reckless and foolhardy (rash) behavior is a common sign of depression.	4	66%
Q24 Of all the alternative and lifestyle treatments for depression, vitamins are likely to be the most helpful.	5	79%
Q15 Having several distinct personalities may be a sign of depression.	6	81%
Q26 Antidepressants are addictive.	7	83%
Q6 People with depression often speak in a rambling and disjointed way.	8	87%
Q10 Not stepping on cracks in the footpath may be a sign of depression.	9	91%
Q11 People with depression often hear voices that are not there.	10	92%
Q7 People with depression may feel guilty when they are not at fault.	11	96%
Q16 People may move more slowly or become agitated as a result of their depression.	11	96%
Q18 Moderate depression disrupts a person's life as much as multiple sclerosis or deafness.	13	98%
Q23 Cognitive behavioral therapy is as effective as antidepressants for mild to moderate depression.	13	98%
Q25 People with depression should stop taking antidepressants as soon as they feel better.	13	98%
Q27 Antidepressant medications usually work straight away.	13	98%
Q9 Loss of confidence and poor self-esteem may be a symptom of depression.	17	100%
Q12 Sleeping too much or too little may be a sign of depression.	17	100%
Q13 Eating too much or losing interest in food may be a sign of depression.	17	100%
Q14 Depression does not affect your memory or concentration.	17	100%
Q19 Most people with depression need to be hospitalized.	17	100%
Q20 Many famous people have suffered from depression.	17	100%

Appendix M

Figure 9. Patient Health Questionnaire-2 (PHQ-2)

Over the past 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than one-half of the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3

Image retrieved from <http://thomasvillepediatrics.com/wp-content/uploads/2016/04/LI042-IG-tools.pdf>

Appendix N

Figure 10. Patient Health Questionnaire-9 (PHQ-9)

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)				
Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems? (Use "✓" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____
=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>